

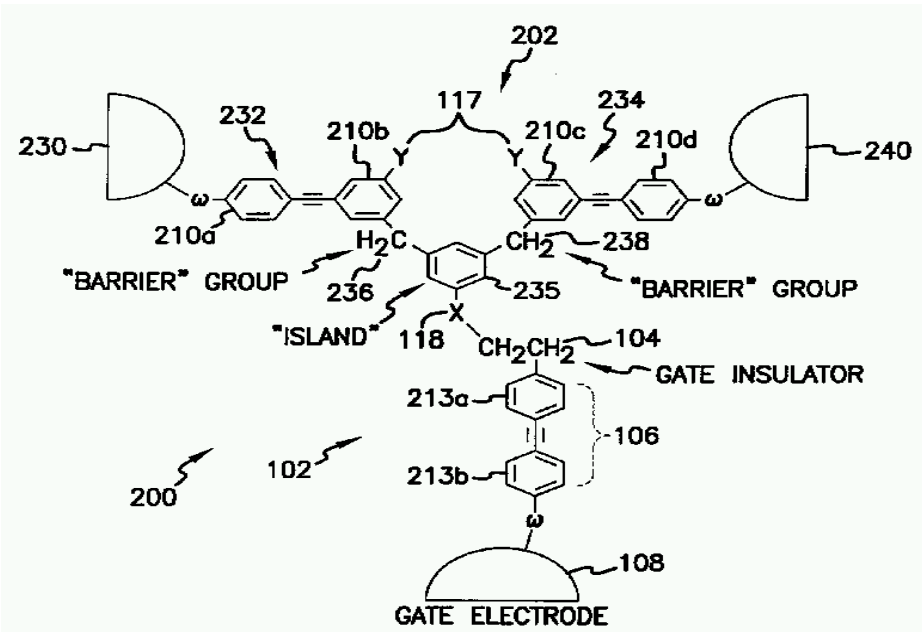
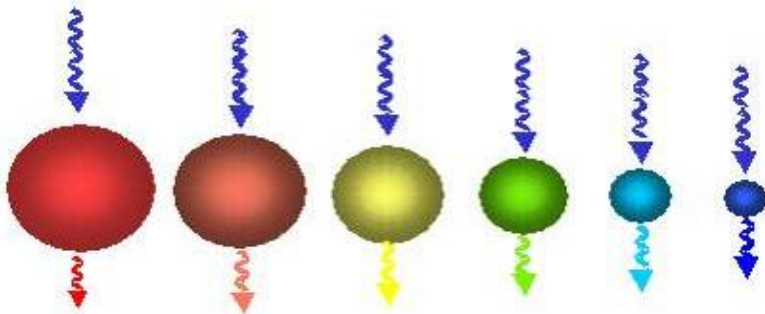
**OECD workshop on statistics and measurement of
Nanotechnology**
Paris, 14th November 2007

Nanotechnology at the European Patent Office

Christian Kallinger, European Patent Office



Nanotechnology



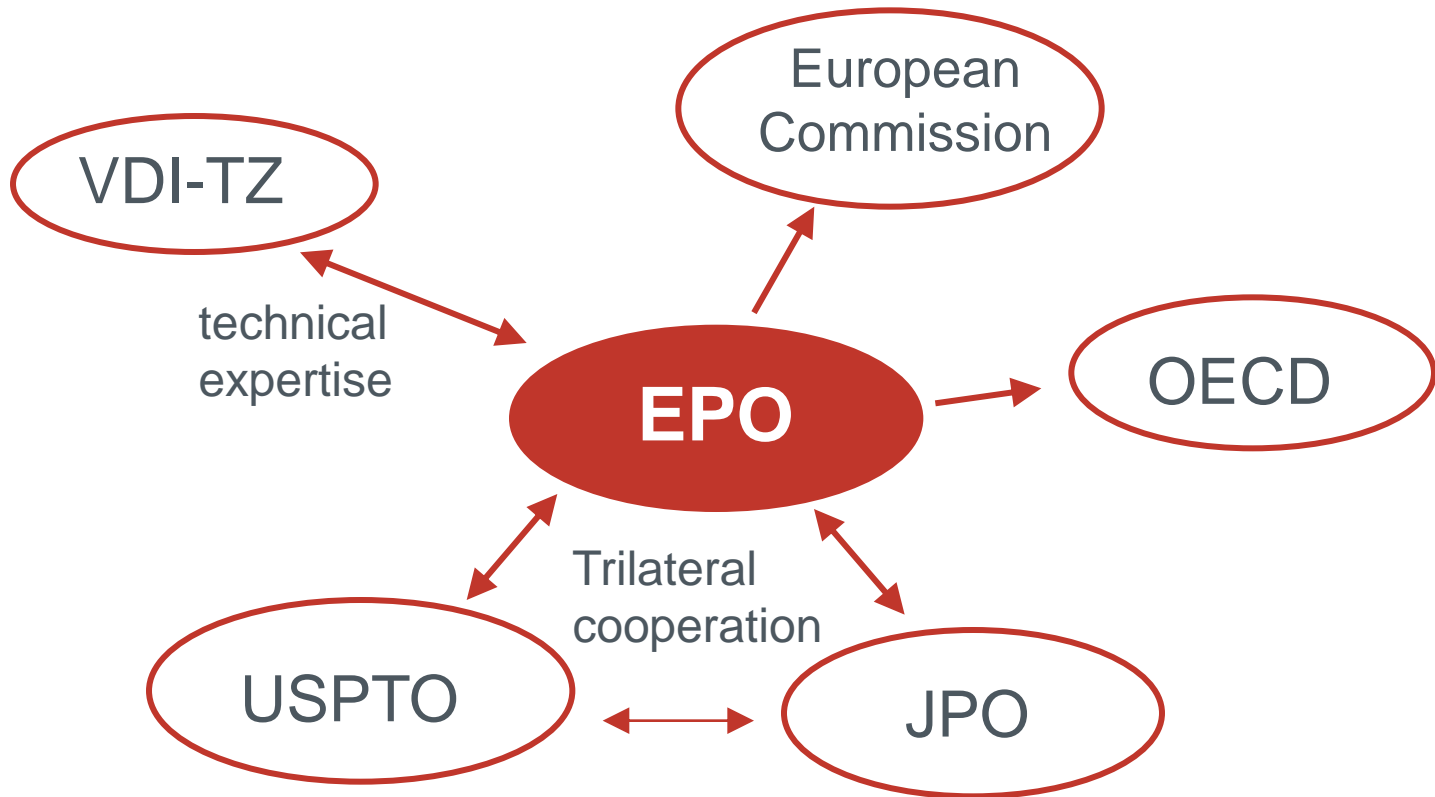
Sources:
www.quantumdot.com
www.cchem.berkeley.edu

Nanotechnology

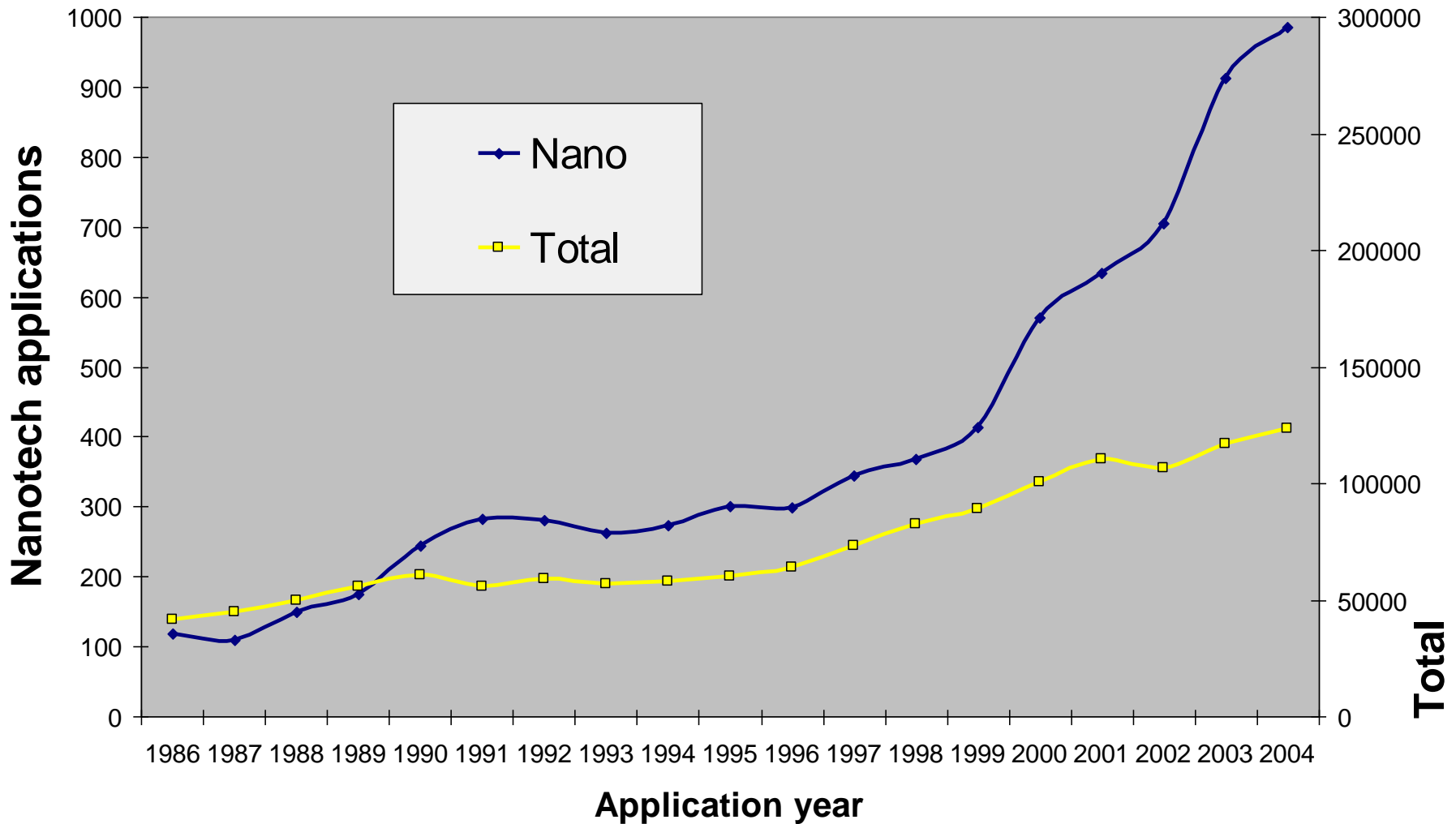
- Interdisciplinary
- Rapidly growing

→ **Challenges for IP Offices**

Cooperations

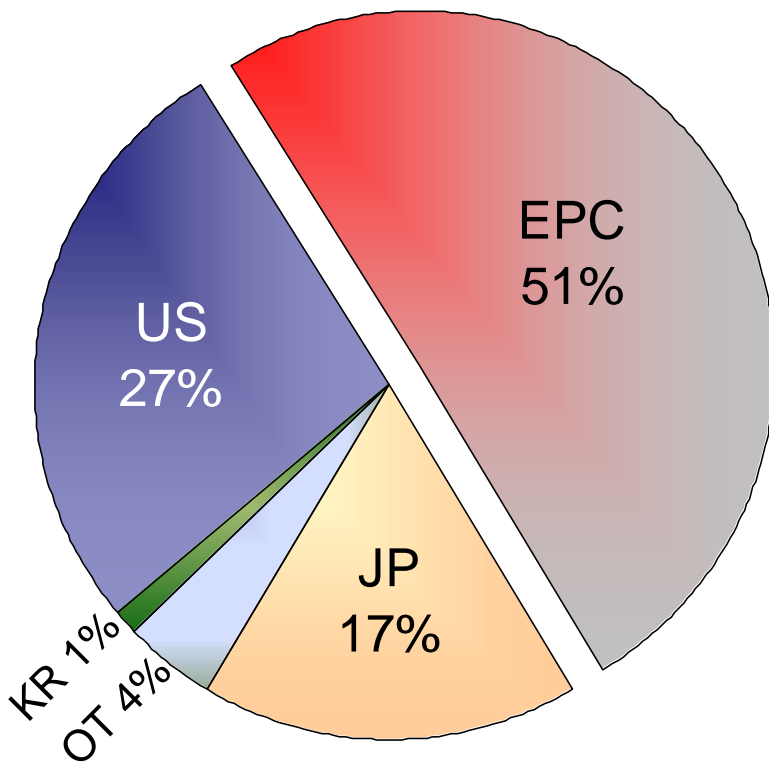


Nanotech applications @ EPO

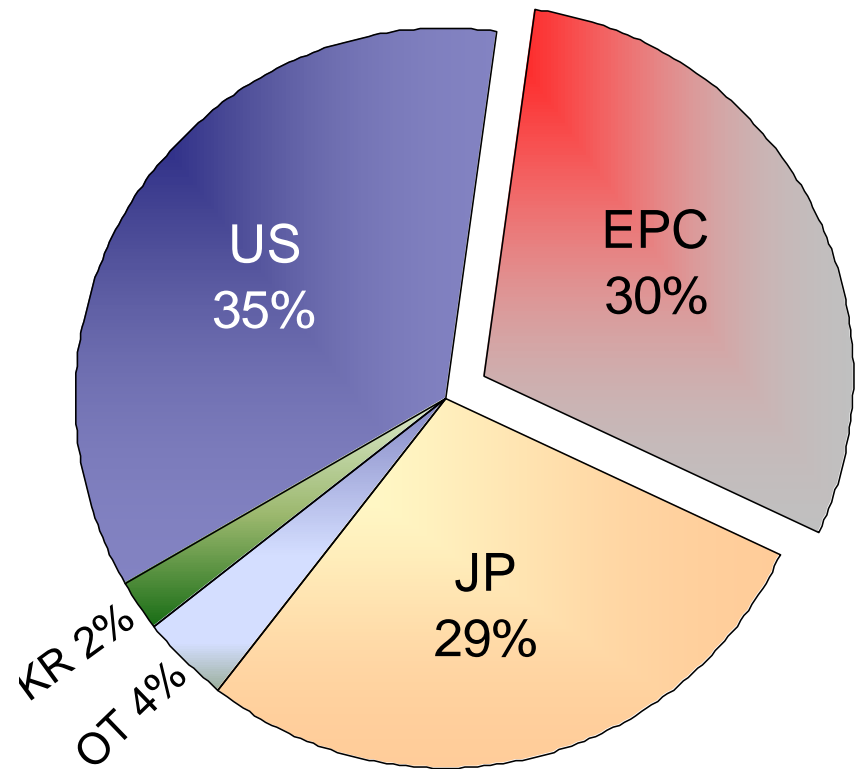


National distribution

All applications
(1986-2006)

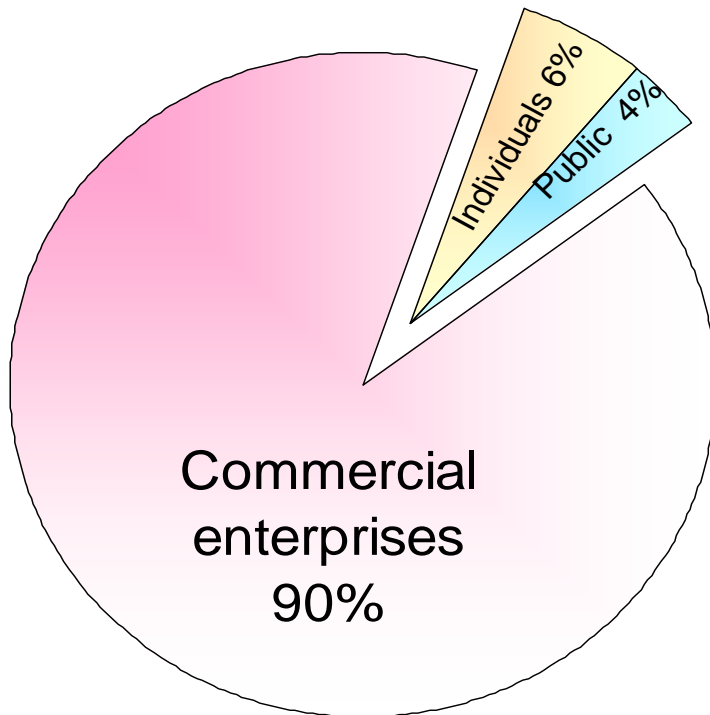


Nanotech applications
(1986-2006)

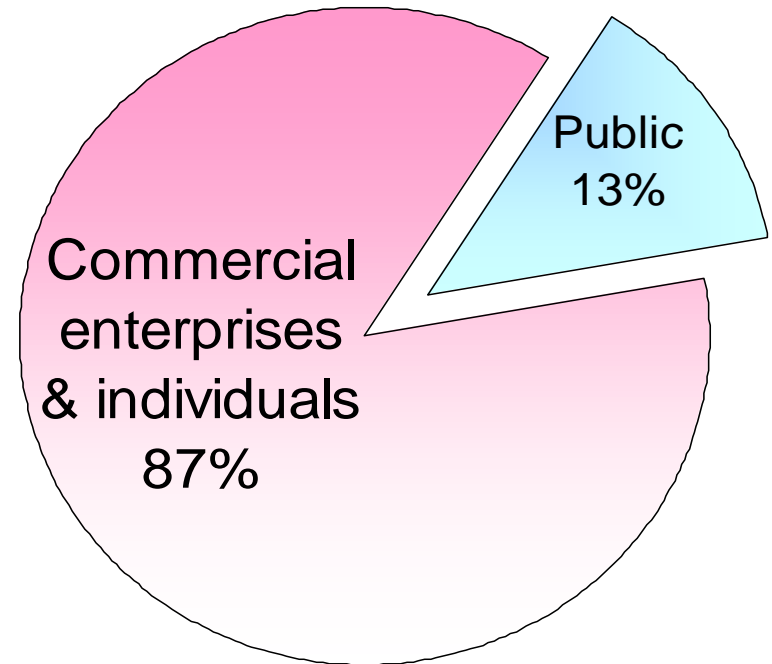


Applicants: Commercial vs. Public

All applications

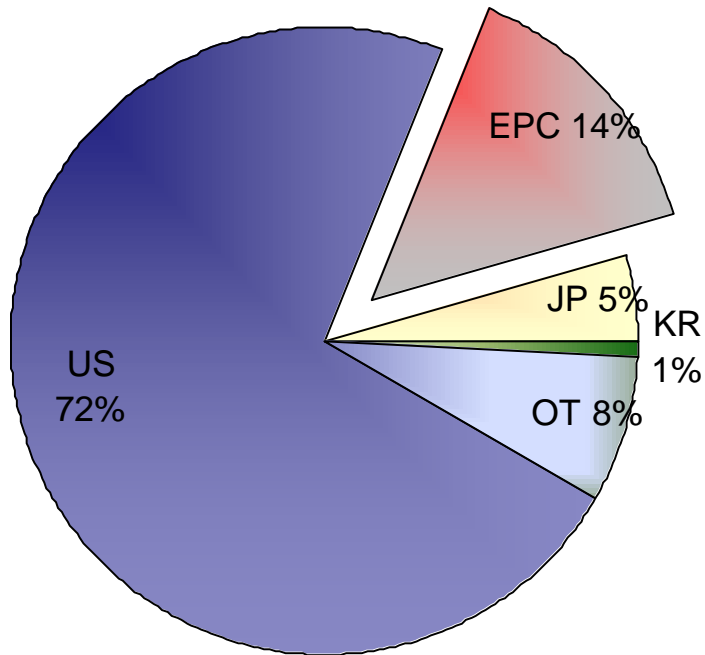


Nanotechnology applications

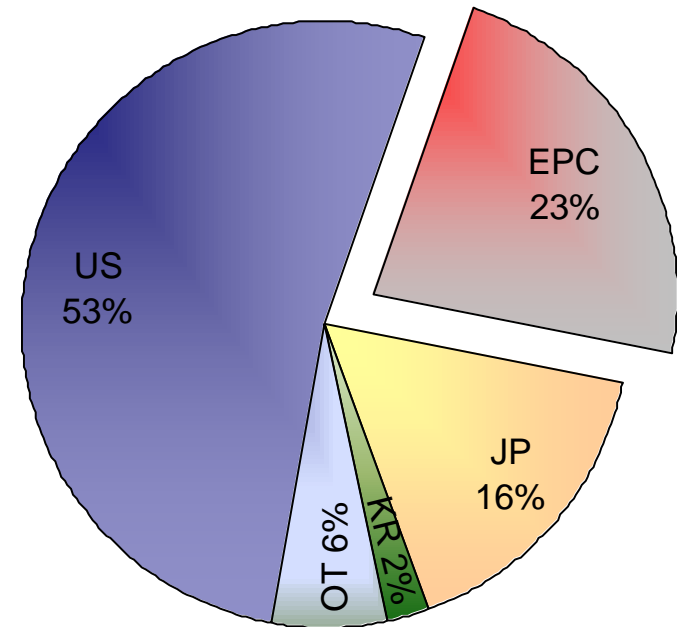


Applicants: Academic vs. Public Authorities

Higher education institutions



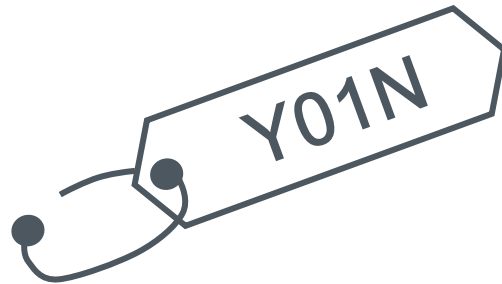
Public authorities



How to count Nanotech patents?

- Multidisciplinary

- Tag for Nanotechnology



- Trends

Thank you for your attention!



Nanotech patents scattered over IPC

SECTION A – HUMAN NECESSITIES

SECTION B – PERFORMING OPERATIONS;
TRANSPORTING

SECTION C – CHEMISTRY; METALLURGY

SECTION D – TEXTILES; PAPER

SECTION E – FIXED CONSTRUCTIONS

SECTION F – MECHANICAL ENGINEERING;

SECTION G – PHYSICS

SECTION H – ELECTRICITY



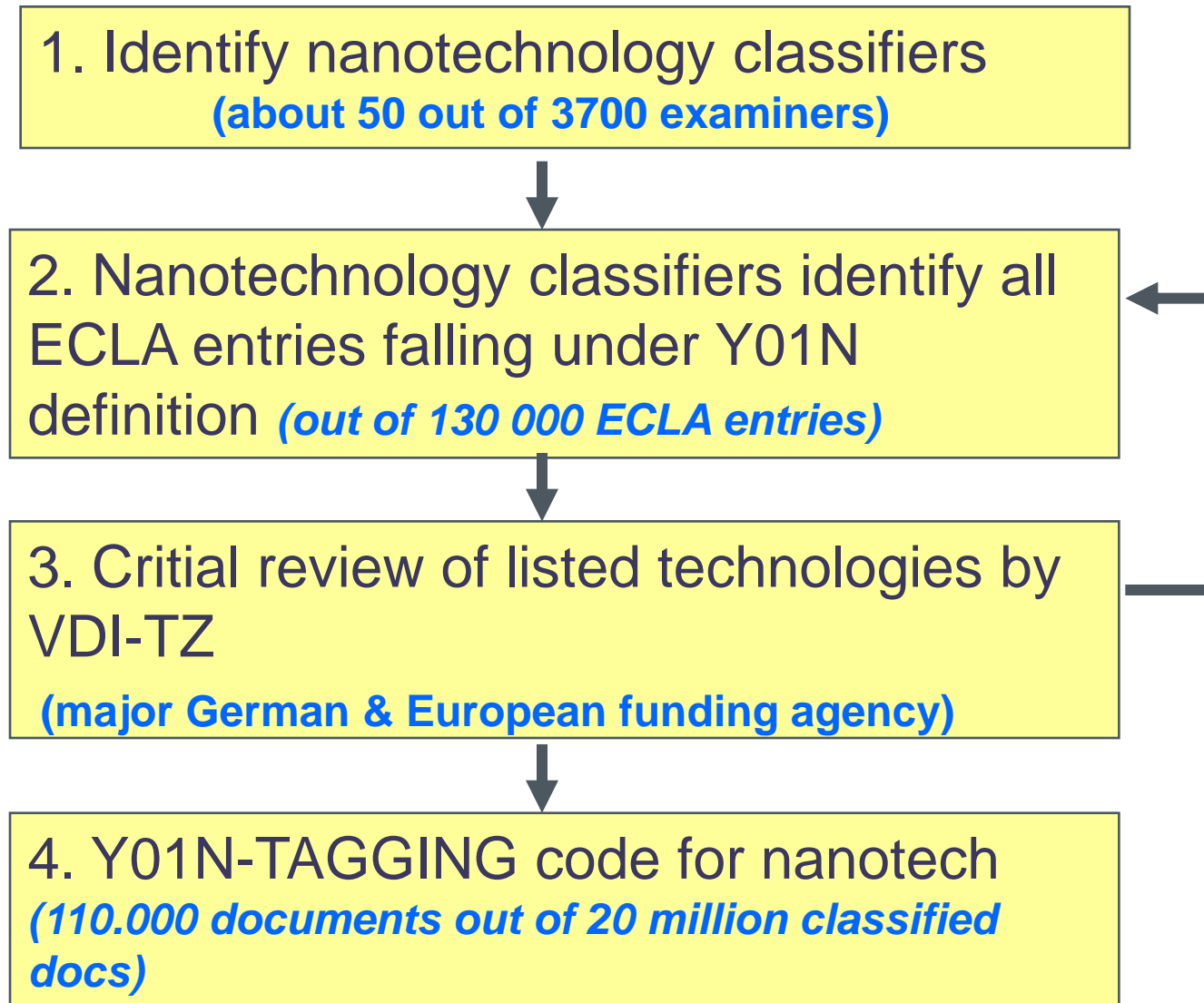
Documents with Y01N tag

Y01N2	15.400 documents
Y01N4	33.300 documents
Y01N6	31.400 documents
Y01N8	11.800 documents
Y01N10	20.000 documents
Y01N12	17.000 documents
Total	≈ 113.000 documents: ≈ 20.000 NPL ≈ 93.000 patent docs (ca. 30500 patent families)

How to tag nanopatents?

reclassify all documents in our databases?	20 000 000 docs * 8 min/docs: 1500 man years
tag only new documents?	incomplete prior art search no time-series
tagging with keyword search?	<u>very</u> large error ("Nano+" yields NaNO_3 , nanolitre, nano which is really micro; cnt = "counter" or "ciliary neurotropic"; etc., etc.)
every examiner should tag?	inconsistency

Methodology (1)



Comparison EPO, USPTO, JPTO

	EPO	USPTO	JPTO
"nano"-TAG	Y01N	977/DIG1	ZNM
number of patent docs	93000	5000	16000
intellectually classified	YES	YES	since 2003 (1200 docs)
Type of docs	EP,WO,US,DE, BE,FR,UK, NL + others & non patent literature	US	JP